



12-16-02
1600

PCT Receipt
DT05 Recd PCT/PTO 09 DEC 2002

Express Mail No.: EL 451 599 054 US

H18
OD

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: KESSLER et al.

Serial No.: 09/530,747

Group Art Unit: 1634

Filed: October 23, 2000

Examiner: TAYLOR, J.

For: SPECIFIC AND SENSITIVE NUCLEIC
ACID DETECTION METHOD

Attorney Docket No.: 1803-302-999

REQUEST FOR CORRECTION OF FILING RECEIPT

Office of Initial Patent Examination
Customer Service
Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicants respectfully request that a Corrected Filing Receipt be issued for the above-referenced patent application.

Enclosed please find a red-marked copy of the Official Filing Receipt that was received from the United States Patent and Trademark Office.

In the Drawings Count:

1. Please correct the number of drawings received to be 7. Attached as *Exhibit A* is a copy of the Informal Drawings, 7 Sheets (Figs. 1-8) as originally filed with the Application.

In the Foreign Applications:

1. Please correct the items listed under Foreign Applications to include the following items:

GERMANY 197 48 690.8 11/04/1997

GERMANY 198 14 001.0 03.28/1998

GERMANY 198 14 828.3 04/02/1998

RECEIVED
JAN 16 2003
TECH CENTER 1600
DEC 09 2002

Exhibit B is the declaration, as originally filed, listing the missing priority document of April 2, 1998 on the second page.

In the Title:

1. Please correct the title to read: "**Specific and Sensitive Nucleic Acid Detection Method**," as stated in the original filed application.

Applicants believe that no fee is due with this paper. However, if it is determined that a fee is due, please charge the required fee to Pennie & Edmonds LLP deposit account No. 16-1150 (order no. 1803-302-999).

Respectfully submitted,

Date: December 9, 2002



42,983

Rahul Pathak

(Reg. No.)

For: Nikolaos C. George (Reg. No. 39,201)
PENNIE & EDMONDS LLP
1155 Avenue Of The Americas
New York, New York 10036
(212) 790-9090

Enclosures



UNITED STATES PATENT AND TRADEMARK OFFICE

O I P E J C Y
DEC - 0 9 2002

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/530,747	10/23/2000	1635	970	4817/OR	67	9	

22829
ROCHE MOLECULAR SYSTEMS INC
 PATENT LAW DEPARTMENT
 1145 ATLANTIC AVENUE
 ALAMEDA, CA 94501

FILING RECEIPT

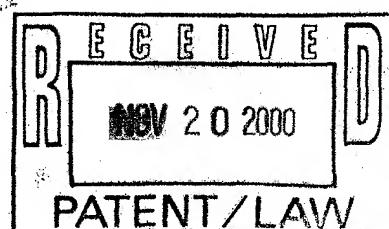
OC000000005545760

Date Mailed: 11/09/2000

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the PTO processes the reply to the Notice, the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Christoph Kessler, Icking, GERMANY;
 Gerd Haberhausen, Iffeldorf, GERMANY;
 Knut Bartl; Wielenbach, GERMANY;
 Henrik Orum, Vaerlose, DENMARK;



Continuing Data as Claimed by Applicant

THIS APPLICATION IS A 371 OF PCT/EP98/06961 11/03/1998

Foreign Applications

GERMANY 197 48 690.8 11/04/1997
 GERMANY 198 14 001.0 03/28/1998
 GERMANY 198 14 828.3 04/02/1998

If Required, Foreign Filing License Granted 11/09/2000

Title

Specific and sensitive method for detecting nucleic acids
 nucleic acid detection method

Preliminary Class

435

Data entry by : ORDENEZ, MARTA

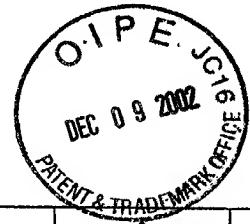
Team : OIPE

Date: 11/09/2000



RECEIVED
JAN 16 2003
TECH CENTER, 1500 PENNSYLVANIA AVENUE, WASHINGTON, D.C.
11/09/2000

Fig. 1



5' [] A B C [] 3' nucleic acid to be detected

3' [] A' B' C' [] 5' complement thereof

Fig. 2

3' [] A' B' C' [] 5' elongation product

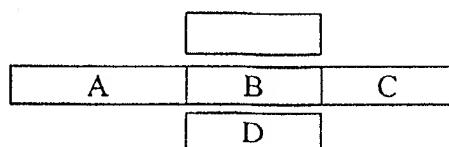
5' [] A B C [] 3' elongation product

5' [] A B C [] 3' amplificate

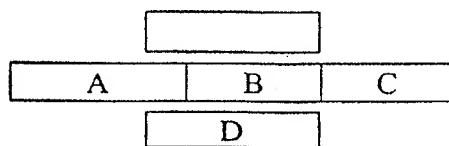
3' [] A' B' C' [] 5' complement of the amplificate

[] Y A B C [] Y amplificate with tails Y

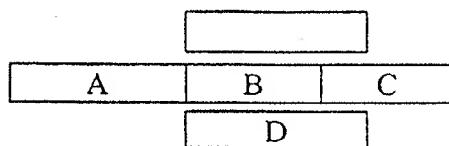
Fig. 3



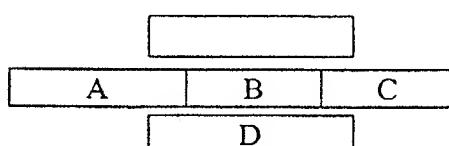
I



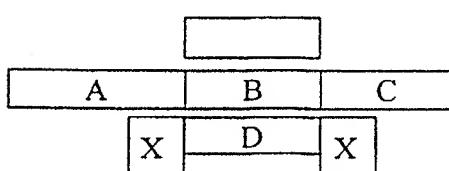
II



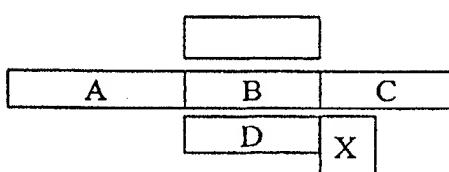
III



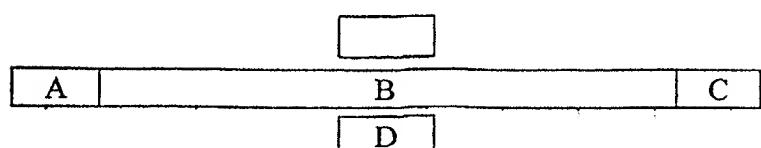
IV



V



VI



VII

Fig. 4



HCV	AGTATGAGTGTCTGCAGCCTCCAGGACCCCCCTCCCGGGAGAGCCA
HUMAN	AGTATGTGTCTGCAGCCTCCAGGACCCCCACTCCCGGGAGAGCCA



FIG. 5

HCVMCR01	AGTATGTTGTGGCAGGCC	
MPF1		CCAGGACCCCCACTCCCCG
MPF1+1		TCCAGGACCCCCACTCCCCG
MPF2		CCAGGACCCCCACTCC
HCV_1A	AGTATGAGTGTGGCAGGCCCTCCAGGCCCCCCCCTCCCCGGAGAGCCA	
HCV_1B	AGTATGAGTGTGGCAGGCCCTCCAGGCCCCCCCCTCCCCGGAGAGCCA	
HCV_2B	AGTATGAGTGTGGCAGGCCCTCCAGGACCCCCCTCCCCGGAGAGCCA	
HCV_MCR	AGTATGTTGTGGCAGGCCCTCCAGGACCCCCACTCCCCGGAGAGCCA	
MPR1_rev&compl	GTCGTGGTGGCAGGCCCTCCAGGA	
MPR2_rev&compl	TCGGTGGCAGGCCCTCCAGGA	
HCVMCR02_rev&compl	CCACTCCCCGGAGAGCCA	
	#1	



FIG 6

RCV
261 5'-GGTACTGCCGTAGGGCTGCTGGAGTCGCGGGAGGTCTCGTAGCCGTGACCATGA-3' 333

Forward primer CK10/Reverse primer CK20
Forward primer CK11/Reverse primer CK20
Forward primer CK10-1/Reverse primer CK20-1
Forward primer CK11-1/Reverse primer CK20-1
Forward primer CK10-2/Reverse primer CK20-2
Forward primer CK11-2/Reverse primer CK20-2

5' - CGTACTGCCGTAGGGCTGCTGGAGTCGCGGGAGGTCTCGTAGCCGTGACCATGA-3'
5' - CGTACTGCCGTAGGGCTGCTGGAGTCGCGGGAGGTCTCGTAGCCGTGACCATGA-3'

Forward primer CK10/Reverse primer CK21
Forward primer CK10-1/Reverse primer CK21-1
Forward primer CK11-1/Reverse primer CK21-1
Forward primer CK10-1/Reverse primer CK21-2
Forward primer CK11-1/Reverse primer CK21-2
Forward primer CK10-2/Reverse primer CK21-3
Forward primer CK11-2/Reverse primer CK21-3

5' - CGTACTGCCGTAGGGCTGCTGGAGTCGCGGGAGGTCTCGTAGCCGTGACCATGA-3'
5' - CGTACTGCCGTAGGGCTGCTGGAGTCGCGGGAGGTCTCGTAGCCGTGACCATGA-3'

HGBV-B
389 5'-CGTACTGCCGTAGGGCTGCTGGAGTCGCGGGAGGTCTCGTAGCCGTGACCATGA-3' 449

FIG 7

HCV 261 5'-GGTACTCTGCTGAATAGGGTGCTTGGGAGTTCCCCCGGGAGGTCCTGTGAACTGCCCACCC-3' 222

Forward primer CK12/Reverse primer CK22	5'- <u>CGT</u> <u>TAG</u> <u>GAT</u> <u>TAG</u> <u>GGT</u> -3'	3'- <u>CC</u> <u>TCA</u> <u>AG</u> <u>GC</u> <u>TCT</u> <u>GGC</u> <u>A</u> <u>T</u> <u>GG</u> <u>TAC</u> <u>G</u> -5'
Forward primer CK12-1/Reverse primer CK22-1	5'- <u>CGT</u> <u>TAG</u> <u>GAT</u> <u>TAG</u> <u>GGT</u> -3'	3'- <u>CT</u> <u>TT</u> <u>M</u> <u>G</u> <u>A</u> <u>I</u> <u>M</u> <u>A</u> <u>T</u> <u>M</u> <u>G</u> <u>T</u> <u>G</u> <u>T</u> <u>A</u> <u>M</u> <u>G</u> -5'
Forward primer CK12-1/Reverse primer CK22-2	5'- <u>CGT</u> <u>TAG</u> <u>GAT</u> <u>TAG</u> <u>GGT</u> -3'	3'- <u>CT</u> <u>TPM</u> <u>G</u> <u>A</u> <u>I</u> <u>M</u> <u>A</u> <u>T</u> <u>M</u> <u>G</u> <u>T</u> <u>G</u> <u>T</u> <u>A</u> <u>M</u> <u>G</u> -5'
Forward primer CK12-1/Reverse primer CK22-3	5'- <u>CGT</u> <u>TAG</u> <u>GAT</u> <u>TAG</u> <u>GGT</u> -3'	3'- <u>M</u> <u>AT</u> <u>TPM</u> <u>G</u> <u>A</u> <u>I</u> <u>M</u> <u>A</u> <u>T</u> <u>M</u> <u>G</u> <u>T</u> <u>G</u> <u>T</u> <u>A</u> <u>M</u> <u>G</u> -5'
Forward primer CK12-2/Reverse primer CK22-4	5'- <u>CGT</u> <u>D</u> <u>M</u> <u>T</u> <u>G</u> <u>A</u> <u>T</u> <u>D</u> <u>T</u> <u>GG</u> <u>T</u> -3'	3'- <u>CT</u> <u>TPM</u> <u>G</u> <u>A</u> <u>I</u> <u>M</u> <u>A</u> <u>T</u> <u>M</u> <u>G</u> <u>T</u> <u>G</u> <u>T</u> <u>A</u> <u>M</u> <u>G</u> -5'
Forward primer CK12-2/Reverse primer CK22-5	5'- <u>CGT</u> <u>D</u> <u>M</u> <u>T</u> <u>G</u> <u>A</u> <u>T</u> <u>D</u> <u>T</u> <u>GG</u> <u>T</u> -3'	3'- <u>M</u> <u>AT</u> <u>TPM</u> <u>G</u> <u>A</u> <u>I</u> <u>M</u> <u>A</u> <u>T</u> <u>M</u> <u>G</u> <u>T</u> <u>G</u> <u>T</u> <u>A</u> <u>M</u> <u>G</u> -5'

Forward primer CK12/Reverse primer CK23	5' - <u>C</u> GTA <u>M</u> G <u>T</u> G <u>A</u> T <u>G</u> GGT-3'	3' - CCTCA <u>A</u> G <u>G</u> G <u>G</u> T <u>G</u> G <u>A</u> T <u>G</u> GTACG-5'
Forward primer CK12-1/Reverse primer CK23-1	5' - CGTA <u>M</u> G <u>T</u> G <u>A</u> T <u>G</u> GGT-3'	3' - CMT <u>M</u> A <u>G</u> G <u>M</u> T <u>M</u> G <u>N</u> A <u>T</u> G <u>T</u> AMG-5'
Forward primer CK12-1/Reverse primer CK23-2	5' - CGTA <u>M</u> G <u>M</u> T <u>A</u> T <u>G</u> GGT-3'	3' - CNT <u>M</u> K <u>A</u> G <u>G</u> M <u>T</u> G <u>E</u> M <u>A</u> T <u>G</u> T <u>A</u> NG-5'
Forward primer CK12-2/Reverse primer CK23-3	5' - CGTD <u>M</u> T <u>E</u> M <u>T</u> D <u>D</u> GGT-3'	3' - NM <u>M</u> K <u>A</u> G <u>G</u> M <u>T</u> G <u>G</u> M <u>A</u> P <u>K</u> GTAMG-5'
Forward primer CK12/Reverse primer CK24	5' - CGTA <u>M</u> G <u>T</u> G <u>A</u> T <u>G</u> GGT-3'	3' - CCT <u>M</u> G <u>G</u> G <u>G</u> T <u>G</u> G <u>C</u> A <u>T</u> G <u>T</u> ACG-5'
Forward primer CK12/Reverse primer CK24-1	5' - CGTA <u>M</u> G <u>T</u> G <u>A</u> T <u>G</u> GGT-3'	3' - CMT <u>M</u> A <u>G</u> G <u>M</u> T <u>M</u> G <u>N</u> A <u>T</u> G <u>T</u> AMG-5'
Forward primer CK12-1/Reverse primer CK24-2	5' - CGTA <u>M</u> G <u>M</u> T <u>A</u> T <u>G</u> GGT-3'	3' - CMT <u>M</u> R <u>K</u> G <u>G</u> M <u>T</u> G <u>E</u> M <u>A</u> T <u>G</u> T <u>A</u> NG-5'
Forward primer CK12-2/Reverse primer CK24-3	5' - CGTD <u>M</u> G <u>M</u> T <u>I</u> D <u>D</u> GGT-3'	3' - MMT <u>M</u> K <u>G</u> G <u>M</u> T <u>M</u> G <u>N</u> A <u>P</u> <u>K</u> GTAMG-5'

FIG. 8

HCV 267 5' CCTTGGTACTGCCGTATAAGGTGCTGGCAGTGCCTGGAGGTCTCGTAGACCGTGCACCATGAGCACGAAT3' 341
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
HGBV-B 383 5' CCATAACCGTACTGCCGTATAAGGTGCTGGCAGGATCTGGAGTCTCGTAGACCGTACATGCCGTATT3' 457

Application Serial No: 09/530,747
 Filed on May 4, 2000
 Attorney Docket No. 4817/0R

Declaration and Power of Attorney for Patent Application

As the below named inventor(s), We hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

SPECIFIC AND SENSITIVE NUCLEIC ACID DETECTION METHOD

the specification of which (check one)

is attached hereto.

was filed on _____ as

Application Serial No. _____

and was amended on _____ (if applicable).

was filed on November 3, 1998 as

PCT International Application Serial No. PCT/EP98/06961

and was amended under PCT Article 19 on November 19, 1999 (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56.

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Priority Claimed

197 48 690.8 (Number)	DE (Country)	4 November 1997 (Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
198 14 001.0 (Number)	DE (Country)	28 March 1998 (Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

198 14 828.3
(Number)

DE
(Country)

2 April 1998
(Day/Month/Year Filed)

[X]
Yes
[]
No

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

(Application No.)

(Filing Date)

(Application No.)

(Filing Date)

(Application No.)

(Filing Date)

(Application No.)

(Filing Date)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

PCT/EP98/06961
(Application Serial No.)

November 3, 1998
(Filing Date)

Pending
(Status) (patented, pending, abandoned)

(Application Serial No.)

(Filing Date)

(Status) (patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the practitioners at Customer Number 22829 to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Send Correspondence to: Customer Number 22829

Direct Telephone Calls Victor K. Lee, Ph.D.
to: (510) 814-2966

CHRISTOPH KESSLER

Full Name Of Sole Or First Inventor

Sole Or First Inventor's Signature

Date

Icking, Germany

Residence

German

Citizenship

Schlossbergweg 11, D-82057 Icking, Germany

Post Office Address

GERD HABERHAUSEN

Full Name Of Second Joint Inventor, If Any

Second Inventor's Signature

Date

Iffeldorf, Germany

Residence

German

Citizenship

Jochbergweg 2, D-82393 Iffeldorf, Germany

Post Office Address

KNUT BARTL

Full Name Of Third Joint Inventor, If Any

Third Inventor's Signature

Date

Wielenbach, Germany

Residence

German

Citizenship

Am Westend 6, D-82407 Wielenbach, Germany

Post Office Address

HENRIK ORUM

Full Name Of Fourth Joint Inventor, If Any

Fourth Inventor's Signature

Date

Vaerlose, Denmark

Residence

Denmark

Citizenship

Vildrosevej 3, DK-3500 Vaerlose, Denmark

Post Office Address

Title 37, Code of Federal Regulations, §1.56, duty to disclose information material to patentability provides, in part, that each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned.

Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.